ECAT Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	The ratio of the gravitational force F_g to the electrostatic force F_e between two electrons at the same distance apart is approximately	A. 9.8 B. 24 x 10¹⁹ C. 24 x 10⁴² D. 24 x 10⁻⁴⁴
2	If electric and gravitational force on an electron in a uniform electric field will be	A. E=mg/q B. E=q/mg C. E=,g/q D. E=qg/m
3	The SI unit of permitivity is	A. Nm²C² B. N⁻¹m⁻²C² C. NmC² D. Nm²C⁻¹
4	The capacitance of a parallel plate capacitor depends upon	A. Area of the plates B. Separation between the plates C. Medium between the plates D. All of the above
5	The thermistors are usually made of	A. Metals with low temperature coefficient of resistivity B. Metals with high temperature coefficient of resistivity C. Metal oxides with high temperature coefficient of resistivity D. Semi conducting materials having low temperature coefficient of resistivity
6	The concept of field theory was put forward by	A. Franklin B. Kepler C. Oersted D. Michael Faraday
7	The SI unit of conductivity is	A. ohm-m B. ohm⁻¹m⁻¹ C. ohm-m⁻¹ D. ohm⁻¹m
8	Surface density of charge is defined as	A. Charge per unit volume B. Charge per unit length C. Charge per unit area D. Charge per unit mass
9	A heater coil rated at (1000 W - 200 V) is connected to 110 volt line. What will be the power consumed?	A. 200 W B. 302.5 C. 250 W D. 350 W
10	A 60 W bulb operates on 220 V supply. The current flowing through the bulb is	A. 11/3 A B. 3 A C. 3/11 A D. 6
11	Heating effect caused by an electric circuit is written	A. H = I²Rt B. H = I²R C. H = IR²t D. H = IR²
12	One joule is equal to	A. 1.6 x 10¹⁹eV B. 6.25 x 10¹⁸eV C. 1.6 x 18¹⁸eV D. 6.25 x 10¹⁹eV
13	When an electron is accelerated through a P.D. of an one volt, it will acquire energy equal to	A. One joule B. One erg C. One electron volt D. None of these
14	The charge per unit time through any cross-section of a conductor is called	A. capacitance B. electric power C. current

		D. potential difference
15	If the length of the conductor is double and its cross sectional area is halved, its conductance will	A. Increase four fold B. Become one-fourth C. Become one-half D. Remains unchanged
16	The minimum charge on any object can not be less than	A. 1.6 x 10⁻¹⁹C B. 3.2 x 10⁻¹⁹C C. 1.0 C D. 4.8 x 10⁻¹⁹C
17	Physicist George Simon ohm was a	A. German physical B. French physicist C. Chinese physicist D. Russian physicist
18	The electric potential at the surface of an atomic nucleus (Z = 50) of radius 9.0 x 10^{-15} is	A. 9 x 10⁵V B. 9 V C. 8 x 10⁶V D. 80 V
19	Resistance of a conductor is increased, the currant will	A. Decrease B. Increase C. Remain the same D. None of these
20	The unit of conductance is	A. ohm B. meter C. mho D. ohm-meter